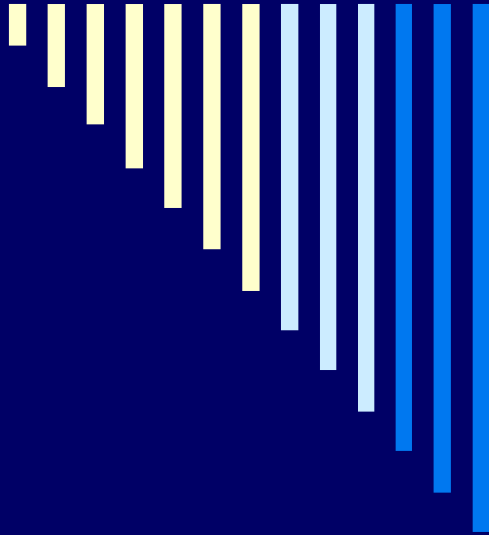
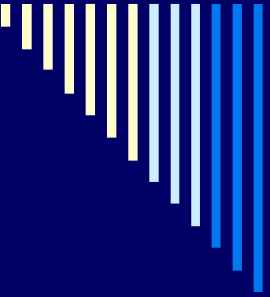




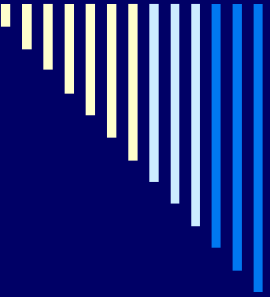
ITAR and AMSAT-NA

Bill Ress

N6GHZ@amsat.org



What is ITAR ?



What is ITAR ?

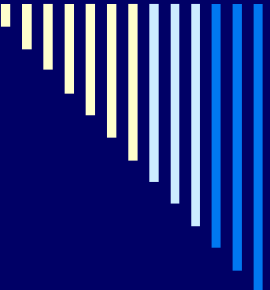
International Traffic in Arms Regulations

ITAR

Administered by
**U.S. Department of
State**

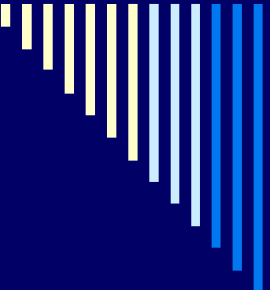


Directorate of Defense Trade Controls
(DDTC)



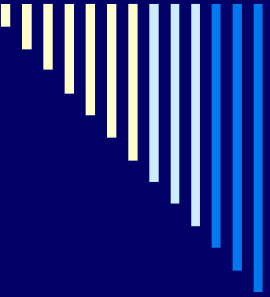
AMSAT-NA Background

- **AMSAT-NA developed the IHU-3**
 - Integrated Housekeeping Unit used on our satellites starting with IHU-1
- **AMSAT-NA desire to support AMSAT-DL on P3E with the IHU-3**
 - Support efforts could fall under ITAR export controls
- **ITAR “paranoia” recently gripped many volunteers**
- **Imperative that AMSAT-NA understand ITAR**
 - Almost 2 years of work by Rick Hambly, President AMSAT-NA



ITAR and Satellites

- **In 1996 commercial satellite jurisdiction transferred to Department of Commerce.**
- **Two launch failures on China's Long March rocket.**
 - Jan 1995 - the Hughes Apstar 2 on a Long March 2E
 - Feb 1996 - Loral Intelsat 708 on a Long March 3B
- **The launch failure analysis between China and Hughes and Loral (insurance requirements)**
- **In 1999 ITAR was transferred to State Department.**



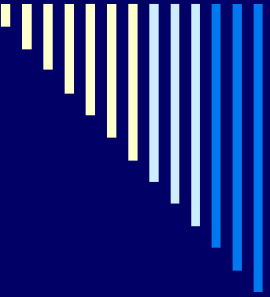
Effects of ITAR

☐ The Positive Effects

- Uncovering and prosecuting of many export violations
- Protection of “sensitive” military and space technology exports

☐ The Negative Effects

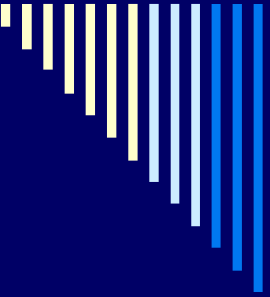
- Regulatory restrictions on industry and academia
- Weakening of the U.S. space industry
- Loss of technological leadership
- Non-U.S. “ITAR Free” competition



Why is AMSAT-NA Affected?

**ITAR considers satellites
and their
related components
as “defense items”**

IF EXPORTED !!



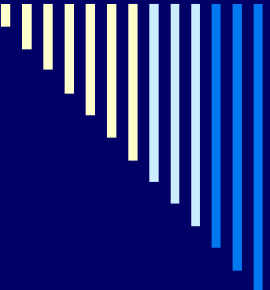
Exports and Deemed Exports

☐ Exports

- Transfer of physical items out of the U.S.

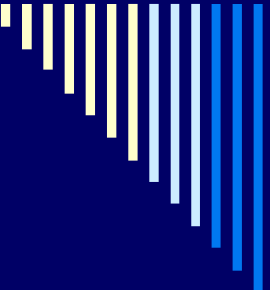
☐ Deemed Exports

- Transfer of data to a foreign person, via mail, email or conversations even when the transfer occurs in the U.S.



Who qualifies as a “foreign person”?

- 1) Non-US Citizen
- 2) Non-US Green Card Holder / Permanent Resident

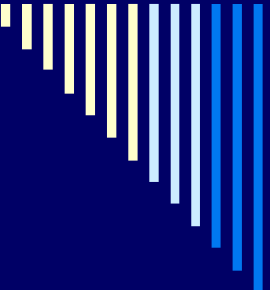


Applicable Export Laws for AMSAT-NA

ITAR - Dept. of State
(Covers Military and Space Munitions)

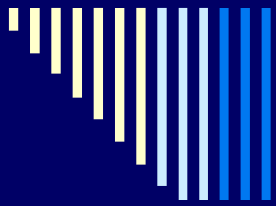
&

**EAR (Export Administration
Regulations) Dept. of Commerce**
(Covers “Dual-Use” Items)



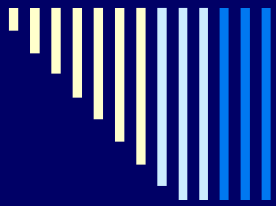
Types of “Defense Articles”

- a) Significant Military Equipment (SME)**
- b) Non-Significant Military Equipment**



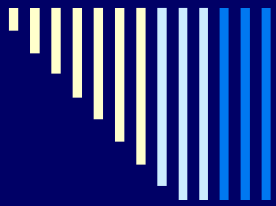
What is a Defense Article? Obvious !





What is a Defense Article? Not Obvious !

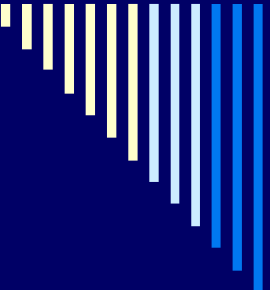




What is a Defense Article? Obvious !





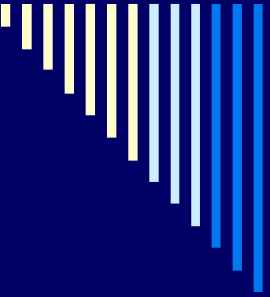


Possible AMSAT-NA Items Covered By ITAR (121.1)

Category IV - Launch Vehicles (adapter ring)

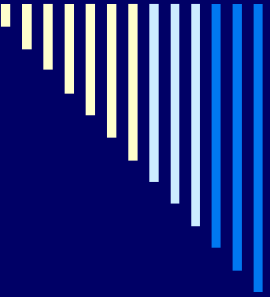
**Category XV - Spacecraft (AO-51) and
Spacecraft Systems
(70 cm RX)**

**Category XI - Military Electronics (computers,
IHU-3)**



What about papers delivered at a AMSAT-NA Symposium??

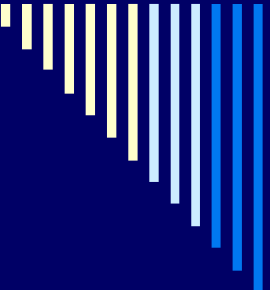
**ITAR 120.11 permits
public domain exchanges
as unlimited distribution
at a conference, meeting,
seminar, trade show or
exhibition generally
accessible to the public
in the U.S.**



Export Compliance Actions Needed

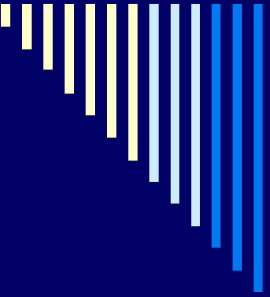
~~By AMSAT-NA?~~

- ➔ Do not view export control rules as a “vial curse” to AMSAT-NA
- ➔ Work within the well defined export control rules and procedures
- ➔ AMSAT-NA is a registered (licensed) “manufacturer and exporter”



Commodity Jurisdiction Determination

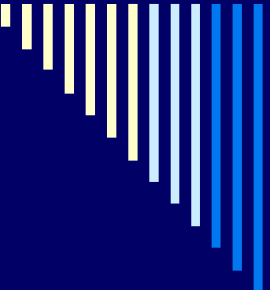
**Ask the State Department to
make a “commodity jurisdiction
determination” for the IHU-3 to
support P3E**



Technical Assistance Agreements (TAA)

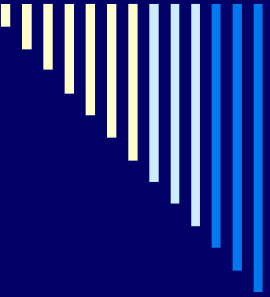
- **Grant rights to disclose technical data and provide technical assistance**
- **No manufacturing or production rights may be provided**

TAA's are specific to country, buyer / end user, product & purpose and must be executed by both the US and foreign parties



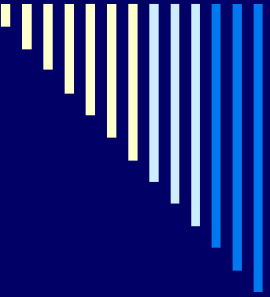
Planned AMSAT-NA TAA Action

**We will draft a TAA *just* between
AMSAT-NA and AMSAT-DL to
provide technical support for *just*
the IHU-3 on the P3E satellite**



Prepare AMSAT-NA Export Compliance Guidelines

This will be an AMSAT-NA document which will guide members involved in designing and building satellites about applicable export control issues.



Conclusion

**US export controls are real and
they apply to AMSAT-NA**

If we are to support **international
Amateur satellite development
we must understand and comply
with the applicable export control
rules.**

QUESTIONS???